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**REMARKS**

Applicant's representative has reviewed and considered the office action mailed on June 30, 2002 and the references cited therewith.

Claims 4 and 10 are amended, no claims are canceled, and no claims are added; as a result, claims 1-25 are now pending in the application. The amendments to claims 4 and 10 find support, for example, in the specification, at page 6, lines 25-26.

***§ 103 Rejection of the Claims***

Claims 1-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Juneja *et al.* (U.S. Patent No. 6,127,728) in view of Beck (U.S. Patent No. 2,695,351) and Benzinger (U.S. Patent No. 3,617,613). Applicant does not admit that Juneja *et al.* is prior art and reserves the right to "swear behind" Juneja *et al.* as provided under 37 C.F.R. 1.131. Applicant respectfully traverses the rejections of claims 1-3 and 7-9.

Claim 1 recites, "the surface layer being free of fibers." Claim 4, as amended, recites, "the surface layer being essentially free of fibers." Claim 7 recites, "the first layer being free of fibers." Claim 10, as amended, recites, "the first resin layer being free of fibers." In contrast, Juneja *et al.* teaches a surface layer (reference number 20 in Fig. 1) formed from prepreg (see labeling on Fig. 1). Prepreg is a reinforcing or molding material (as paper or glass cloth) impregnated with a synthetic resin. (Dictionary definition of prepreg.) Thus, the surface layer of Juneja *et al.* includes fibers (i.e., paper includes fibers and glass cloth includes fibers). Hence, Juneja *et al.* fails to teach or suggest "the surface layer being free of fibers" or "the surface layer being essentially free of fibers." The office action suggests that Beck teaches a surface layer that is free of fibers. Applicant respectfully disagrees. Beck teaches a surface layer of "an insulating resinous sheet." Prepreg, which includes resin and fibers, such as paper or glass fibers, is "an insulating resinous sheet." (column 3, lines 44-45) Thus, Beck fails to teach or suggest, "the surface layer being free of fibers." Hence, the references fail to teach or

suggest each of the elements of claims 1, 4, 7, and 10. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claims 1, 4, 7, and 10.

Claims 2 and 3 are dependent on claim 1. Claims 5 and 6 are dependent on claim 4. Claims 8 and 9 are dependent on claim 7. Claims 11 and 12 are dependent on claim 10. For reasons analogous to those stated above and elements in the claims, applicant respectfully submits that the office action fails to state a *prima facie* case of obviousness with respect to claims 2, 3, 5, 6, 8, 9, 11 and 12.

Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 1-12.

Claims 13-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the applicant admitted prior art shown in figure 1 in view of Juneja *et al.* (U.S. Patent No. 6,127,728) and Benzinger (U.S. Patent No. 3,617,613). Applicant does not admit that Juneja *et al.* is prior art and reserves the right to "swear behind" Juneja *et al.* as provided under 37 C.F.R. 1.131. Applicant respectfully traverses the rejections of claims 13-18.

Claimd 13 and 16 recite, "a number of fibers having a fiber thickness of between about .001 inches and about .002 inches." In contrast, Benzinger, which the office action relies on to establish the recited element, in the abstract, teaches, "the fibers of which have diameters in the range of 0.2 to 14 microns." When .001 inches is converted to microns, the result is 25.4 microns. When .002 inches is converted to microns, the result is 50.8 microns. Hence, since Benzinger teaches "the fibers of which have diameters in the range of 0.2 to 14 microns," and since .001 inches is 25.4 microns and .002 inches is 50.8 microns, Benzinger fails to teach or suggest "fibers having a fiber thickness of between about .001 inches and about .002 inches." In addition, neither Juneja *et al.* nor the applicant admitted prior art teach or suggest, "a number of fibers having a fiber thickness of between about .001 inches and about .002 inches," as recited in claims 13 and 16. Thus, neither Benzinger, nor Juneja *et al.*, nor the applicant admitted prior art, either alone or in combination, teach or suggest, each of the elements of claims 13 and

16, so the office action fails to state a *prima facie* case of obviousness with respect to claims 13 and 16.

Claims 14 and 15 are dependent on claim 13. Claims 17 and 18 are dependent on claim 19. For reasons analogous to those stated above and elements in the claims applicant respectfully submits that the office action fails to state a *prima facie* case of obviousness with respect to claims 14, 15, 17, and 18.

Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 13-18.

Claim 19 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the applicant admitted prior art shown in figure 1 in view of Juneja *et al.* (U.S. Patent No. 6,127,728), Benzinger (U.S. Patent No. 3,617,613), and Beck (U.S. Patent No. 2,695,351). Applicant does not admit that Juneja *et al.* is prior art and reserves the right to "swear behind" Juneja *et al.* as provided under 37 C.F.R. 1.131. Applicant respectfully traverses the rejection of claims 19.

Claim 19 recites, "a number of fibers having a fiber thickness of between about .001 inches and about .002 inches." In contrast, Benzinger, which the office action relies on to establish the recited element, in the abstract, teaches, "the fibers of which have diameters in the range of 0.2 to 14 microns." When .001 inches is converted to microns, the result is 25.4 microns. When .002 inches is converted to microns, the result is 50.8 microns. Hence, since Benzinger teaches "the fibers of which have diameters in the range of 0.2 to 14 microns," and since .001 inches is 25.4 microns and .002 inches is 50.8 microns, Benzinger fails to teach or suggest "fibers having a fiber thickness of between about .001 inches and about .002 inches." In addition, neither Juneja *et al.* nor the applicant admitted prior art, nor Beck teach or suggest, "a number of fibers having a fiber thickness of between about .001 inches and about .002 inches," as recited in claim 19. Thus, neither Benzinger, nor Juneja *et al.*, nor Beck, nor the applicant admitted prior art, either alone or in combination, teach or suggest, each of the elements of claim 19, so the office action fails to state a *prima facie* case of obviousness with respect to claim 19.

AMENDMENT AND RESPONSE UNDER 37 C.F.R. § 1.111

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Title: CIRCUIT BOARD

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Docket: 303.705US1

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*Allowed Claims*

Claims 20-25 were allowed.

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*Conclusion*

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone applicant's attorney at 612-371-2109 to facilitate prosecution of the application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

TONGBI JIANG ET AL.

By their Representatives,

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October 31, 2003

Date

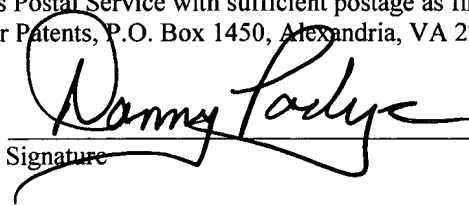


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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 31 day of October, 2003.

DANNY J. PADYS

Name



Signature